Amendments to the Claims:

This listing of claims will replace all prior version, and listings, of claims in the application. Where claims have been amended and/or canceled, such amendments and/or cancellations are done without prejudice and/or waiver and/or disclaimer to the claimed and/or disclosed subject matter, and the applicant and/or assignee reserves the right to claim this subject matter and/or other disclosed subject matter in a continuing application.

Listing of Claims:

1. (Currently amended): Data transmission process comprising,

a) at transmission:

- the data to be transmitted is divided into N transmitted data blocks (B1, B2, ..., BN),

- these N blocks are processed in parallel in N M-ary orthogonal keying (MOK) modulation channels, each modulation using a group of spread codes, each channel outputting a signal (S_1, S_2, ..., S_N), ~~and a rank of the signals according to energy or amplitude, or combinations thereof,~~

- N spread signals output by said N M-ary orthogonal keying modulation channels are combined in a combining circuit, and

- the signal output by said combining circuit is transmitted,

b) at reception:

- the signal received (R) is processed in N M-ary orthogonal keying (MOK) demodulation channels, giving N received data blocks (B_1, B_2, ..., B_N), said N received data blocks (B_1, B_2, ..., B_N) being ranked according to energy or amplitude of associated portions of said received signal,

- said N received data blocks are grouped together in series to reproduce the transmitted data.

2. (Previously presented): Process according to claim 1, wherein the modulation and demodulation include are comprised of M-ary bi-orthogonal keying (MBOK) modulation and demodulation.

3. (Previously presented): Process according to claim 1, wherein the modulation and demodulation include M-ary orthogonal keying (MOK) modulation and demodulation combined with phase shift keying (PSK) modulation and demodulation.

4. (Previously presented): Process according to claim 3, wherein the phase shift keying modulation and demodulation include differential phase shift keying (DPSK) modulation and demodulation.

5. (Previously presented): Process according to Claim 1, wherein the number of spread codes is the same in each group.

6. (Previously presented): Process according to Claim 1, wherein the spread codes used are all different from one group to another and the code numbers are equal to powers of 2.

7. (Previously presented): Process according to Claim 1, wherein certain spread codes are used in several groups.

8 - 11. (Cancelled).

12. (Currently amended): A receiver, comprising:

- means for processing a signal received (R) in parallel in N M-ary orthogonal keying (MOK) demodulation channels, giving N data blocks (B_1, B_2, ..., B_N), the N data blocks corresponding to signals ~~previously~~ ranked according to energy or amplitude, or combinations thereof,

and

- means for grouping ~~these~~ said N data blocks together in series and ~~reproduce~~ reproducing transmitted data.

13. (Previously presented): The receiver according to claim 12, wherein the demodulation comprises an M-ary bi-orthogonal keying (MBOK) demodulation.

14. (Previously presented): The receiver according to claim 12, wherein the demodulation comprises an M-ary orthogonal keying (MOK) demodulation combined with a phase shift keying (PSK) demodulation.

15. (Previously presented): The receiver according to claim 14, wherein the phase shift keying demodulation comprises a differential phase shift keying (DPSK) demodulation.

16. (Previously presented): Process according to Claim 4, wherein the number of spread codes is the same in each group.

17. (Previously presented): Process according to Claim 5, wherein the spread codes used are all different from one group to another and the code numbers are equal to powers of 2.

18. (Previously presented): Process according to claim 1, wherein, at reception, the signal received (R) is processed in a group of P filters (11_1, 11_2, ...,11_P) distributed in N groups of filters, these filters being adapted to the spread code of the different groups of spread codes used at transmission.

19. (Previously presented): The receiver according to claim 12, comprising P filters distributed in N groups of filters, these filters being adapted to spread code of the different groups of spread codes used at transmission.

20. (new) A method comprising:

processing a received signal at a plurality of filters to provide a plurality of portions of said received signal;

ranking said plurality of portions based, at least in part, on amplitudes or energy associated with said portions; and

demodulating said portions based, at least in part, on said ranking to provide a plurality of associated data blocks.

21. (new) The method of claim 20, wherein said demodulating said portions further comprises:

retrieving a plurality of codes according to rankings of associated portions of said received signal; and

processing said associated portions of said received signal based, at least in part, on said retrieved codes to provide said associated data blocks.

22. (new) The method of claim 21, wherein said processing said associated portions of said received signal comprises de-spreading said associated portions based, at least in part, on said retrieved codes.

23. (new) The method of claim 20, wherein said demodulating said portions further comprises demodulating said portions according to a M-ary orthogonal keying modulation technique.

24. (new) The method of claim 23, wherein said demodulating said portions further comprises demodulating said portions according to a phase shift keying modulation technique.

25. (new) The method of claim 20, wherein said demodulating said portions further comprises demodulating said portions according to an M-ary bi-orthogonal keying modulation technique.

26. (new) A receiver to process a received signal, the receiver comprising:

a plurality of filters to provide a plurality of portions of said received in response to said received signal;

a circuit adapted to rank said plurality of portions based, at least in part, on amplitudes or energy associated with said portions; and

a plurality of demodulators associated with said plurality of portions and adapted to demodulate said associated plurality of portions based, at least in part, on said rank.

27. (new) The receiver of claim 26, and further comprising a plurality of code tables, and wherein said plurality of demodulators are further adapted to process said associated portions based, at least in part, on codes retrieved from said code tables, said codes being retrieved from said code tables based, at least in part, on said ranking of said plurality of portions.

28. (new) The receiver claim 27, wherein said plurality of demodulators are further adapted to process said associated portions of said received signal by de-spreading said associated portions based, at least in part, on said retrieved codes.

29. (new) The receiver of claim 26, wherein said plurality of demodulators are further adapted to demodulate said portions according to a M-ary orthogonal keying modulation technique.

30. (new) The receiver of claim 29, wherein said plurality of demodulators are further adapted to demodulate said portions according to a phase shift keying

modulation technique.

31. (new) The receiver of claim 26, wherein said plurality of demodulators are further adapted to demodulate said portions according to an M-ary bi-orthogonal keying modulation technique.